

REMARKS

Claims 1-21 are pending. Claims 1-11 stand rejected. Claims 1, 5, and 9 have been amended while Claims 12-21 are new. Support for the amendments and new Claims can be found in the Specification page 8, line 13 through page 10, line 13 and Fig. 1.

CLAIM REJECTIONS – 35 USC § 102: The Examiner rejected Claims 1-11 as being unpatentable over USPN 6,384,918 issued to Hubble. Hubble discloses a spectrometer for measuring colors of test strips on a printed sheet. See Hubble, Abstract. Hubble's disclosed design includes a circular grouping of LEDs (D1-D10) surrounding a single photo diode detector (D12). Flux from each LED is collimated and directed to be applied to the same test strip. A lens then focuses the illuminated test strip on the photo diode detector. Hubble, col. 16, line 58 through col. 17, line 44.

Claim 1 is directed to a system for color measurement for a color hard copy apparatus, having a print media transport path. As amended, Claim 1 includes the following limitations:

- a. an illumination source adjacent to said path;
- b. a plurality of photodetectors adjacent to said path; and
- c. test strips each of a single color formed on a sheet of media traveling said path, each strip having a geometric configuration such that each of said photodetectors detects substantially discrete regions of that strip.

Hubble does not teach a test strip having a configuration that allows each or a plurality of photodetectors to detect a discrete region of that test strip. Instead Hubble teaches the sequentially illuminating a common region of a test strip and sequentially recording output responses of a single photo diode detector. Hubble, col. 16, line 58 through col. 17, line 44. For these reasons Claim 1 is felt to distinguish over Hubble.

Claims 2-4 each depend from Claim 1 and include all the limitations of that base claim. For the same reasons Claim 1 is patentable, so are Claims 2-4.

Claim 5 is directed to a color hard copy apparatus, having a mechanism generating a pattern of test strips of intended uniform colors on media transported

along a predetermined path through said apparatus. As amended, Claim 5 includes the following limitations:

- a. adjacent said path downstream of the mechanism, a broad band illumination source mounted for illuminating said strips; and
- b. adjacent said path downstream of the mechanism, an array of sensors mounted for detecting color properties of discrete areas of each test strip.

Hubble does not disclose an array of sensors mounted for detecting color properties of discrete areas of each test strip. Instead Hubble teaches the sequentially illuminating a common region of a test strip and sequentially recording output responses of a single photo diode detector. Hubble, col. 16, line 58 through col. 17, line 44. For these reasons Claim 5 is felt to distinguish over Hubble.

Claims 6-8 each depend from Claim 5 and include all the limitations of that base claim. For the same reasons Claim 5 is patentable, so are Claims 6-8.

Claim 9 is directed to a method for measuring actual color produced by a color hard copy device. As amended, Claim 9 includes the following limitations.

- a. illuminating with broad band light, a region of a color test pattern generated by the device, wherein said region has a first color generated by the device;
- b. discretely sensing actual color characteristics of discrete areas of said region; and
- c. storing data representative of said color characteristics.

Hubble does not disclose discretely sensing actual color characteristics of discrete areas of a given region of a test pattern. Instead Hubble teaches sequentially illuminating a common region of a test strip and sequentially recording output responses of a single photo diode detector measuring color characteristics of that common region. Hubble, col. 16, line 58 through col. 17, line 44. For these reasons Claim 5 is felt to distinguish over Hubble.

Claims 10 and 11 each depend from Claim 9 and include all the limitations of that base claim. For the same reasons Claim 9 is patentable, so are Claims 10 and 11.

Each of Claims 12-15 includes, at least indirectly, the following limitation:

- a. an array of sensors located downstream from the printing engine along a direction of travel of the printing medium, the array of sensors being oriented along an axis that is generally parallel to an orientation of the test strips, wherein as each test strip passes within view of the array of sensors, each sensor is positioned to detect a substantially discrete region of that test strip.

Hubble does not teach a sensor array that meets these limitations. For at least this reason, Claims 12-15 are felt to distinguish over Hubble.

Each of Claims 17 and 18 includes, at least indirectly, the following limitation:

- a. an array of photodetectors oriented along an axis that is generally parallel to an orientation of the test strips, wherein as each test strip passes within view of the array of photodetectors, each photodetector is positioned to measure a spectral characteristic a substantially discrete region of that test strip as the test strip passes within view of the sensor array.

Hubble does not teach a photodetector array that meets these limitations. For at least this reason, Claims 17 and 18 are felt to distinguish over Hubble.

Each of Claims 19-21 includes, at least indirectly, the following limitations:

- a. forming a test pattern of color strips on a print medium;
- b. providing an array of photodetectors oriented along an axis that is generally parallel to an orientation of the test strips;
- c. urging the print media past the array; and
- d. for each test strip, using each photodetector in the array to measure a spectral characteristic a substantially discrete region of that test strip as the test strip passes within view of the array.

Hubble does not teach the provision of such an array of photodetectors nor does Hubble teach the use of the photodetectors in the manner prescribed. For at least these reason, Claims 19-21 are felt to distinguish over Hubble.

CONCLUSION: The foregoing is believed to be a complete response to the outstanding Office Action. Claims 1-21 are felt to be in condition for allowance. Consequently, early and favorable action allowing these claims and passing the application to issue is earnestly solicited. The foregoing is believed to be a complete response to the outstanding Office Action.

Respectfully submitted,

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